

## INFLIGHT COMMUNICATIONS & ENTERTAINMENT SYSTEMS

Manufacturer or Service	Model/System/Service	General Capabilities	Remarks
<b>Aerial View Systems</b> P.O. Box 9905 Newport Beach, Calif. 92658 (714) 969-2470; Fax: (714) 969-5543; <a href="http://www.aerialviewsystems.com">www.aerialviewsystems.com</a>	AVS 420 Auto-xoom Entertainment Camera	Cabin Video	24 x 200 m stabilized camera that automatically zooms for taxi, takeoff and landing while permitting passengers to adjust the zoom from wide-angle for taxi to telephoto at any time. Includes camera control unit (CCU), camera head, 2m cable, connectors, installation racks, trays and gussets. \$12,800
	AVS 460 Entertainment Camera	Cabin Video	Miniature 2x telephoto lens; camera head and servo automatically adjust to different viewing attitudes for taxi, take-off and landing while permitting the passengers to adjust the tilt at any time. Includes camera control unit (CCU), camera head, servo, lens, 2m cables, connectors, installation rack, tray and gussets.
	AVS 470 & AVS 470-AF SuperVision Camera	Cabin Video	<b>AVS470 (tail and winglet)</b> — 4 mm wide-angle camera installed at the top of the tail providing panoramic view of the aircraft, sky and landscape ahead. Engines, thrust reversers, flaps/slats, ailerons and spoilers can be viewed. <b>AVS470 (winglet)</b> — 7.5 mm wide-angle camera installed in the winglet to assist pilot during taxi. <b>AVS470 (gear door auto-flip)</b> — 7.5 mm wide-angle camera installed through the nose gear trailing-link door permitting pilots to observe the gear, blown tires, hot brakes, flaps/slats, APU, ice, FOD, etc. Auto-flip automatically inverts video for the passenger landscape viewing when the gear is up. <b>AVS 480 Map Trac</b> — MapTrac software including interactive and auto-camera tracking of point of interest, POL library, moving maps, log and data page.
<b>Aircell LLC</b> 303 S. Technology Ct. Building A Broomfield, CO 80021 (303) 301-3200 (888) 328-0200 Fax: (303) 926-8970 <a href="http://www.aircell.com">www.aircell.com</a>	Aircell ST 3100	Satellite communication system with Iridium voice and narrowband data. Optional fax and cockpit data services	Single-channel Iridium satcom system providing global voice and narrowband data services for passengers and crew. Can accommodate up to three handsets with large-format color displays, advanced noise reduction and earbud jacks. Monochromatic wireless handset also available. Cradle, flush-mount, reel and portable handset styles available. Integrated RS 232 modem, audio panel/POTS intercom and cockpit/cabin intercom. Supports popular cockpit data service programs from Satcom Direct, Honeywell and ARINC Direct. \$22,735 for full system. Two-year warranty with extensions available.
	Aircell Axxess II	Cabin communications system with Iridium voice and narrowband data. Optional fax, cockpit data service and interfaces for Aircell Broadband, SwiftBroadband, Swift64 and Inmarsat Classic	Multi-channel cabin communications system offering global voice and narrowband data capabilities, with optional broadband service for passengers and crew. Included are color handset (wired or wireless) with advanced noise reduction and earbus jacks; 802.11b/g Wi-Fi hotspot and full PBX switching functions. System is "network neutral" and can provide service over many different networks. Two built-in channels of Iridium Satellite service are included for voice and low-speed data, and two additional Iridium channels are optional. Compatible with optional Aircell Broadband and SwiftBroadband systems for high-speed data, and Inmarsat Classic service for voice and low-speed data. Fax capability. Also supports popular cockpit data service programs from Satcom Direct, Honeywell and ARINC Direct. \$41,969, full basic system; some options and interfaces require additional equipment. Multiple service plans available. Two-year limited warranty with extensions available.
	Aircell Axxess EZ	Cabin communication systems with Iridium voice and narrowband data. For MagnaStar replacement. Optional fax, cockpit data services and interfaces for Aircell Broadband, SwiftBroadband, Swift64 and Inmarsat Classic.	Multi-channel cabin communications system offering global voice and narrowband data capabilities, with optional broadband service for passengers and crew. Designed specifically as a MagnaStar replacement system, Aircell Axxess EZ reuses existing MagnaStar wiring and component locations, easing installation requirements and reducing aircraft downtime. Included are next-generation color handsets (wired or wireless) with advanced noise reduction and earbud jacks. 802.11b Wi-Fi hotspot and full PBX switching functions. System is "network neutral" and can provide service over many different networks. Two built-in channels of Iridium Satellite service are included for voice and low-speed data, and two additional Iridium channels are optional. Compatible with optional Aircell Broadband and SwiftBroadband systems for high-speed data, and Inmarsat Classic service for voice and low-speed data. Fax capability. Also supports popular cockpit data service programs from Satcom Direct, Honeywell and ARINC Direct. \$44,964, full basic system; some options and interfaces require additional equipment. Multiple service plans available. Two-year limited warranty with extensions available.

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	Aircell's SwiftBroadBand Solution	Provides global voice and data connectivity for e-mail and light Internet	SwiftBroadband is Inmarsat's global aeronautical service offering global in-flight voice and data connectivity at up to 432 kbps per channel (depending on antenna choice). Powered by Thrane & Thrane, Aircell's SwiftBroadband system offers global e-mail, light Internet, voice service and other features. Compatible with most Wi-Fi laptops, smartphones or PDAs. Sold and supported through Aircell and its worldwide dealer and distributor network, it includes a dual LRU system (one 2 MCU and other, approximatley 1 MCU). The system's standard intermediate-gain antenna provides connection speeds up to 332 kbps. \$80,000 includes full basic system. Wireless connectivity and other options available for additional cost. System is available integrated with Aircell Axxess cabin system or as a standalone. Two-year limited waranty with extensions available.
<b>Alto Aviation</b> 113 Tolman Ave. Leominster, MA 01453 (978) 466 5992 (800) 814) 0123 Fax: (978) 466 5996 <a href="http://www.altoaviation.com">www.altoaviation.com</a>	Alto Executive System	Audio system with custom equalization specific to customer's aircraft model and floor plan. Consists of up to 4 ASP-512 speaker enclosures, 2 ASW-514 subwoofers and the AA-606DC amplifier with custom EQ	The Executive System is best suited for aircraft the seat four to eight passengers, depending on airframe and floor plane. System weighs 13.5 lb.
	Alto Global System	Same as above	Designed for large cabins and additional components orengineering, as well as cabins with several audio "zones" and requires special engineering in each zone.
	Alto Custom Complete System	Same as above	Designed for larger aircraft with one or more zones such as a BBJ, Airbus and other transport category aircraft.
	Alto nVELOP System	Same as Above	Provides an optimal surround experience for each seat, whether forward- or aft-facing, VIP or club.

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<b>Aircraft Cabin Systems</b> 2609-151st Pl. N.E. Redmond, Wa. 98052-5522 (425) 833-8008 <a href="http://www.aircraftcabinsystems.com">www.aircraftcabinsystems.com</a>	Plasma video monitors	cabin video	42-in. (70.0 lb) and 50-in. (99.2 lb) diagonal plasma screen monitors; 16.9 aspect ratio; 3.5-in. depth; infrared remote included. Optional wall-mounting brackets. NTSC, PAL, PAL-60, SECAM Video SDTV/480p and VGA/SVGA/UXGA compatible; AV input jacks; S-video; RGB PC and computer audio inputs; RS 232C interface; 16.77 million display colors.
	CrystalTint LCD monitors	cabin video	Available in 43 in. and 50 in. diagonal sizes. Non-reflective glass. Infrared remote; NTSC and PAL automatic switching.
<b>AIRVOD</b> Heather House Heather Rd. Sandyford Industrial Estate Dublin 18, Ireland +353 1 2913030 info@airvod.com <a href="http://www.airvod.com">www.airvod.com</a>	see remarks	cabin audio, cabin video, cabin management, portable IFE	AIRVOD offers air carriers an "end-to-end in-flight entertainment solution," including hardware, content, maintenance and provisioning to deliver revenue generating in-flight entertainment services. As part of the service, AIRVOD can provide movie and GUI language options, content acquisition, subtitles and dubbed languages, content uploading, maintenance, headsets, distribution, collection and storage on the ground and onboard, seat back brackets, trolley storage trays, payment mechanisms and reconciliation, advertising revenues, online reservations, and other options.
<b>ARINC</b> 255 Riva Rd. Annapolis, Md. 21401-7465 (410) 956-5465 (301) 858-4000 (800) 633-6882 Fax: (410) 573-3300 <a href="http://www.arinc.com">www.arinc.com</a>	SKYLink by ARINC Direct Satellite Service	E-mail/Internet, SMS Inmarsat compatible, Swift Broadband, fax, Ku-band service	Inflight broadband (up to 3.5 Mbps) satellite service. Secure access e-mail, Internet and corporate intranets. Tail-mounted antenna fits on larger business aircraft. COTS satcom avionics; Ku-band dish antenna for two-way HSD link via satellite, SkyLink dish antenna.
<b>ASiQ Ltd.</b> Factory 2 1 Contour Cl, Research, Victoria, 3095, Australia +61-3-9437-1233 <a href="http://www.asiq.com">www.asiq.com</a>	see remarks	cabin audio, cabin video, cabin management, Wi-Fi Hotspot, e-mail, Internet, SMS, Swift Broadband, Iridium compatible	Company offers four services: "ASiQnet" connectivity provides passengers with access to E-mail and the Internet from as little as \$1, and in some cases absolutely free. "Air-Commerce" provides destination specific, cached web capable content, to passengers in their seats. The passenger dials up the Network Server Unit (NSU) from their laptop and can then navigate to pages of interest using their favorite web browser. "SafeCell" is a cell phone accessory that is designed to convert a cell phone into a wireless data communicator for use in-flight. SafeCell does not rely on the cell phone transmitter, so it applies to handsets with Bluetooth or Com ports operating on all networks. "G3CARS" is an electronic Crew Reporting and Information System, which replaces the existing manual system by eliminating the requirement for paper.
<b>Audio International</b> (subsidiary of DeCrane Aerospace) 7300 Industry Dr. North Little Rock, Ark. 72117 (501) 955-2929 Fax: (501)955-2988 <a href="http://www.decraneaerospace.com">www.decraneaerospace.com</a>	see remarks	cabin audio, cabin video, cabin management	Company produces a wide variety of cabin audio and video systems and subsystems including DVD/CD players and a wide variety of LCD flatscreen monitors. Recently introduced a line of touchscreen monitors.
<b>Avidyne Corp.</b> 55 Old Bedford Rd. Lincoln, MA 01773 (781) 402-7400 (800) AVIDYNE Fax: (781) 401-7599 <a href="http://www.avidyne.com">www.avidyne.com</a> infor@avidyne.com	MLB700 SIRIUS Broadcast Datalink Receiver	Delivers datalink graphical weather from WSI InFlight via the SIRIUS Satellite Network. Optional audio entertainment from SIRIUS Satellite Radio	Compatible with Avidyne displays including EX500 and EX5000 MFD. \$4,745 data only version; \$5,495 data and audio entertainment version (includes wireless remote) Subscription services, \$44.00 and \$29.99. TSO C157.
	MLX770 Iridium two-way worldwide datalink transceiver	Delivers worldwide aviation-quality datalink graphical weather from WSI InFlight via the Iridium Satellite Network. Also provides two-way text messaging and e-mail capability	Compatible with Avidyne display including EX500 and EX5000 MFD, and growing list of EFBs. \$11,995. Subscription services approximately \$70 to \$120 per month based on 10 hrs. or flying.

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<b>Avionica, Inc.</b> 9941 W. Jessamine St. Miami, FL 33157 (786) 544-1100 <a href="http://www.avionica.com">www.avionica.com</a> <a href="mailto:sales@avionica.com">sales@avionica.com</a>	Wide range of aircraft data communications products and service	See remarks	<b>miniQAR:</b> A miniature quick-access recorder, available in combi versions with both ARINC 717 and ARINC 429 data ports <b>secureLINK:</b> An airborne 802.11 wireless gatelink <b>satLINK:</b> An Iridium data and voice communications management module <b>RSU-II Ruggedized Service Unit:</b> A universal handheld Windows XP tablet computer supporting flight data download, real-time monitoring, ARINC 429 data bus analysis, ARINC 615 data-loading and other features. <b>avSCAN:</b> A flight data analysis tool for ARINC 717, ARINC 429 and MIL-1553 data. <b>USB429win:</b> A USB 2.0-based ARINC 429 data bus analyzer for Windows XP <b>LOAD615win:</b> A USB 2.0-based ARINC 615 data-loader for Windows XP
<b>Avionics Innovations</b> 2450 Montecito Rd Ramona, CA 92065 (760) 788-2602 <a href="http://www.avionicsinnovations.com">www.avionicsinnovations.com</a>	see remarks	cabin audio, cabin video, cabin management	Company designs and manufactures a wide variety of FAA/PMA approved integrated video, audio entertainment and cabin management systems for business aviation.
<b>Blue Sky Network</b> 1298 Prospect Street Ste. 1D La Jolla, CA 92037 (858) 551-3894 <a href="http://www.blueskynetwork.com">www.blueskynetwork.com</a>	see remarks	cabin audio, Iridium compatible, system integration, dial-up data;	Near real-time GPS-based flight tracking, single-channel antenna feed for Iridium and GPS. Internal or panel installed controls; "Quick Position" Mayday alert button available. Two-way e-mail messaging; Ethernet port for access to internal Web pages; automatic takeoff and landing reports; RS 232 port for telemetry data; altitude-based reporting interval; LED status indication for message waiting; SkyRouter service provide integration with the popular mapping system from Google. Enables users on the ground to track live flights and examine past flight for detailed analysis.
<b>CMC Esterline</b> 600 Dr. Frederick Phillips Blvd. Montreal, Quebec, Canada H4M2S9 (514) 748-3184 Fax: (514) 748-3100 <a href="http://www.cmcelectronics.ca">www.cmcelectronics.ca</a>	CMA-220 Inmarsat intermediate-gain sat-com antenna system	Inmarsat Aero-1	Multi-channel (6) voice and data antenna. ARINC 761. \$40,787.
	SatLite Inmarsat high-gain antenna system	Inmarsat compatible, for SwiftBroadband, Swift64/128, Inmarsat Aero H/H+	Compact ARINC 781 antenna system for single-channel voice and data. Facilitates Aero H+/Swift 64 Services. Ideal for narrow-body air transport and larger business jet aircraft applications. \$79,104.
	CMA-2102LW Inmarsat high-gain antenna	Inmarsat compatible, Swift64/128, Inmarsat Aero H/H+	New lighter-weight ARINC 741 SwiftBroadband antenna system for multi-channel (3) voice and data. \$143,717.
	CMA-2102SB Inmarsat high-gain antenna	Inmarsat compatible, Swift64/128, Inmarsat Aero	New light-weight ARINC 741/761 antenna system for multi-channel (3) voice and data. \$143,717.
<b>EMS SATCOM</b> 400 Maple Grove Rd. Ottawa, Ontario K2V 1B8 Canada North America +1 800 600 9759 Worldwide +1 613 591 1043 <a href="http://www.emssatcom.com">www.emssatcom.com</a>	eNfusion™ Communications Convergence Unit (CCU) and CNX Cabin Gateway Family of Networking Products	Cabin Data Acceleration, Networking and Voice PBX	Enables passengers with wired Ethernet and wireless 802.11g network as well as wireless voice communications and data acceleration (CNX-200 Network Accelerator). The CNX-300 Mobile Access Router includes a CISCO® MAR. The CCU (Communications Convergence Unit) functions as a PBX, Wi-Fi access point, Ethernet switch, DHCP server and router. Aero-X and ARINC compatible. Options start at \$26,325
	eNfusion HSD-400 Transceiver	Inmarsat compatible, Swift Broadband, Swift64	Can operate as standalone Satcom with an ARINC 741/781 Satcom antenna; supports Mini-M voice and Swift64. 1 Aero H+ Voice; Electronic Flight Bag (EFB) enabler. \$194,940.
	eNfusion HSD-440 Transceiver	"Inmarsat Swift-Broadband & Swift64 AeroH+ and Safety Services	ACARS Data, Aero-H+ voice for cockpit and cabin. 1 x SwiftBroadband or 2 x Swift64. Single LRU solution for Cockpit and Cabin communications enabling BlackBerry usage and EFB connectivity. \$194,940
	eNfusion HSD-Xi Expansion Transceiver	Inmarsat SwiftBroadband & Swift 64	Add-on module to the eNfusion HSD series providing an additional SwiftBroadband channel. \$59,400
	eNfusion AMT-700 High-gain Antenna	Inmarsat High-gain Antenna System	2 LRU tail-mount antenna subsystem for multi-channel voice and data. Compatible with Inmarsat Aero H/H+/Swift 64 & SwiftBroadband and will operate with any ARINC 741 / 781 Satcom avionics and HSD-400 / HSD-440. \$93,825
	eNfusion AMT-50 High-gain Antenna	Inmarsat High-gain Antenna System	Tail-mount antenna subsystem for multi-channel voice and data. Compatible with Inmarsat Aero H/H+/Swift64/SwiftBroadband; Operates with any ARINC 741 / 781 Satcom avionics and HSD-128 / HSD-400 / HSD-440. \$93,825
	eNfusion AMT-50G High-gain Antenna	Inmarsat High-gain Antenna System	Tail-mount antenna subsystem for multi-channel voice and data. Replaces Gulfstream factory-installed antenna on Gulfstream GIII through GV aircraft. Operates with any ARINC 741 / 781 Satcom avionics and HSD-400 / HSD-440. \$100,575.

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<b>EMS SATCOM</b> 400 Maple Grove Rd. Ottawa, Ontario K2V 1B8 Canada North America +1 800 600 9759 Worldwide +1 613 591 1043 <a href="http://www.emssatcom.com">www.emssatcom.com</a>	eNfusion AMT-3800 High-gain antenna	Inmarsat High-gain Antenna System	Fuselage-mount ARINC 781 high-gain phased array antenna that supports multichannel voice and data. Fully compatible with Inmarsat Aero H/H+, Swift64 and SwiftBroadband Class 6. \$87,7500
	eNfusion AMT-3500 Intermediate-gain antenna	Inmarsat Intermediate-gain Antenna System	Fuselage-mount ARINC 781 intermediate-gain phased array antenna that supports multichannel voice and data. Designed for operations with Aero I and SwiftBroadband Class 7 services. \$67,365
	eNfusion System 7	Inmarsat SwiftBroadband Class 7 Solution	Complete communications package. Includes HSD-467 High-speed Data Terminal, an AMT-3500 Intermediate-gain Antenna, and the CCU-200 Communications Convergence Unit. Offers voice, data Internet access and cost effective email alternative through BlackBerry or other personal electronic devices. \$137,000.
	eNfusion System 6	Inmarsat SwiftBroadband Class 6 Solution	Complete communications package. Includes HSD-467 High-speed Data Terminal, an AMT-3800 Intermediate-gain Antenna, and the CCU-200 Communications Convergence Unit. Offers voice, data Internet access and cost effective email alternative through BlackBerry or other personal electronic devices. \$175,000
<b>Flight Display Systems</b> 1765 Grassland Parkway Alpharetta, Ga. 30004 (678) 867-6717 Fax: (678) 867-6742 <a href="http://www.FlightDisplay.com">www.FlightDisplay.com</a> <a href="http://www.EllipseTV.com">www.EllipseTV.com</a>	multiple	Company produces more than 40 cabin entertainment products including moving map displays, LCD monitors from 7 inches to 42 inches, wireless audio systems, DVD players and glareshield cameras.	Ellipse TV system employs an elliptically shaped, dorsal mounted, low profile, phased array, mechanically steered antenna manufactured by KVH Industries. The system is initially approved for the Bombardier Challenger 600 with a pending STC amendment for the 601 through 605 series aircraft. Multiple STC approvals are in the works for other airframes including various Gulfstream models. Company also produces a 5-inch LCD for cockpit applications. An in-flight High-Definition (HD) video system was recently introduced.
<b>Garmin International</b> 1200 E. 151st St. Olathe, KS 66062 (800) 800-1020 (913) 397-8200 <a href="http://www.garmin.com">www.garmin.com</a>	GDL 69A XM radio receiver	Cabin audio	Delivers over 170 channels of XM Satellite Radio programming to the aircraft. Optional GRC 10 remote control allows passenger selection of channel, category, volume and other features.
<b>Heads Up Technologies, Inc.</b> 2033 Chennault Ste. 100 Carrollton, TX 75006 (972) 980-4890 (800) 367-4770 (US Only) Fax: (972) 980-4843 <a href="http://www.heads-up.com">www.heads-up.com</a>	PBS250	Passenger Briefing System	Plays up to eight different messages to aircraft passengers with studio-quality safety information such as takeoff, landing, turbulence and rapid decompression briefings as well as Frequent Flyer programs and promotional messages are possible. The PBS250 can interface with other onboard systems to provide fully automatic messages. New messages are uploaded in the field using a laptop computer. Certified for CFR Part 21, RTCA/DO-160D, and RTCA/DO-178B, Level D.
	PBS400	Passenger Briefing System	This solid-state unit provides an unlimited number of messages to passengers in up to four languages. The system can interface with other aircraft systems for fully automatic message capability. New messages are downloaded in the field using a laptop computer. Certified for CFR Part 21, RTCA/DO-160B, and RTCA/DO-178A, non-essential criticality.
	PBS600 Digital Pre-recorded Announcement Machine (PRAM)	Passenger Briefing System	Provides studio-quality passenger briefings in up to 63 languages. Safety briefings may be automatically or manually triggered. Optional boarding music is possible. Certified for CFR Part 21, RTCA/DO-160B, and RTCA/DO-178A, non-essential criticality.

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<b>Honeywell Aerospace</b> 2111 N. 19th Ave. Phoenix, AZ 85027 (800) 872-7739 Int'l: (602) 436-5977 <a href="http://www.honeywell.com">www.honeywell.com</a>	Ovation C-Series Cabin Management System (CMS)	Built around a bi-directional Controller Area Network (CAN) data bus backbone. System's icon-based, touch-screen PCU dock operates all of the cabin's audio and video sources, including lighting, temperature, window shades and galley functions from the comfort of the passenger's seat.	The removable device fits into any existing cup holder location and can integrate iPod or MP3 players with installed speakers, monitors and control devices (PCUs and touchscreens). While the dock's primary device interface (A/V-in and power-out) is an iPod proprietary connector, unit comes with a standard 3.5mm aux-in jack for other MP3 players. Comes with standard USB connector for charging function.
	Cup Holder Media Dock	By replacing an existing cup holder location with this Cup Holder Media Dock, the passenger's iPod or other MP3 player is integrated with the CMS.	Operating under license from Apple, this device enables operators to add this integrated audio/video source to their existing cabin configuration. The Dock charges the iPod, distributes its audio and video across the CMS and also provides an auxiliary audio/video 3.5mm input jack for non-iPod devices.
	JetMap II	Moving map and information system for passengers to monitor their flight progress and other features. Integrated handheld remote control included. A USB port on the front of the device facilitates the rapid download of the newer databases.	Enables passengers to monitor their flight progress with high-resolution, worldwide terrain maps (and street-level maps in the U.S.), as well as flight path tracking, time to destination, altitude, speed, heading and other features, such as Sun Maps; Relative Location Indicator (RLI) depicts direction and distance to nearby cities; Night Graphics Setting provides easy viewing in a darkened cabin; Customizable features include corporate logos and multi-language audio and video safety briefings. Using its own embedded Iridium transceiver, or an already installed Satcom system, JetMap II can provide the latest headlines, financial news, sports and weather. By overlaying up-to-the-minute headlines with flight and route information, passengers can view complete news stories, review individual stock prices, market updates, and get current weather conditions.
	MCS-4000	MCS-4000	The MCS-4000 system supports four communication channels capable of simultaneous full duplex voice communications and one channel of data communications. (3 voice + 1 data)
	MCS-7000	Inmarsat compatible, Aero H/H+ (6 voice + 1 data), Safety Services Certified	The MCS-7000 offers users a seven channel connection to the ground for simultaneous voice, fax and modem transmissions. (6 voice + 1 data)
	MCS-7100 Series	See Remarks/Description	Satcom service based around the company's new HD-710 Satcom unit. A scalable architecture allows for upgrade to any existing Honeywell MCS System to include Swift64 and SwiftBroadband. Can operate as a standalone device supporting Classic Aero voice and Classic Aero data (for safety services), Swift64, SwiftBroadband and Epic interfaces.
	MCS-7120	Inmarsat compatible, Aero H/H+ (1 voice + 1 data), Safety Services Certified, Swift64 (2 channels) or SwiftBroadband (1 channel)	The company's latest Satcom terminal provides voice and high-speed data. Offers one Classic Aero channel, one Packet Data channel and either two channels of Swift64 or one channel of SwiftBroadband. Offers high-speed transfer for both cockpit communications (Aero H/H+, EFB, Safety Services, AFIS data) and cabin communication systems (voice, Internet, Ethernet, fax).
	MCS-7163	Inmarsat compatible, Aero H/H+ (2/5 voice + 1 data), Safety Services Certified, Swift64 (2 channels) or SwiftBroadband (2 channels)	Upgrade hardware for any existing Honeywell MCS-6000 or MCS-3000 system. This system is a simple retrofit upgrade to add Swift64/SwiftBroadband by just replacing the HPA. The main benefit of this retrofit upgrade is the SDU/RFU remain the same. The HD-710 is a drop-in replacement for the HPA. To utilize Swift64/SwiftBroadband it only requires wiring additions.

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<b>Honeywell Aerospace</b> 2111 N. 19th Ave. Phoenix, AZ 85027 (800) 872-7739 International: (602) 436-5977 <a href="http://www.honeywell.com">www.honeywell.com</a>	Communication Gateway System	Multiple Ethernet Interfaces; integrated Wireless Access Point (WAP) capability (IEEE 802.11 a/b/g standards), connected or remote antenna, VOIP capable; USB power for charging carry-on electronics; flexible installation options.	" Comprised of two LRUs—the CG-710 and the CR-710—the Communication Gateway System combines three functions into one system. The CGS provides IP PBX, airborne networking, data acceleration/compression, on-board cabin network enabling the passengers to surf the Internet, send/receive email, and host videoconferences. Multiple telephone calls can be made and received on and off the aircraft via wired or wireless handsets using the IP PBX functionality.
	AIS-2000 Satellite Television	Provides multi-region coverage of live televised news, sports, weather, and movies in selected areas around the world.	Programming and content is supplied by DirecTV (USA) and various free-to-air and subscription services throughout the world. The system provides six independent channels and the capability of hosting up to three receiver modules at any one time, each with two receiver cards.
<b>International Communications Group</b> 230 Pickett's Line Newport News, VA 23603 (757) 947-1030 (800) 279-1991 Fax: (757) 947-1035 <a href="http://www.intcomgrp.com">www.intcomgrp.com</a>	AeroCom 3000 CTU	Inmarsat compatible, Swift Broadband, Iridium compatible, Inmarsat I	Cabin Telecommunications Unit (CTU) in a 6 MCU form factor designed for large to intermediate corporate aircraft. This PABX system is compatible with transceivers and services of all types and can integrate the following: multiple Iridium, Magnastar ARTUs, multiple Cept-E1 circuits, HF radio, PA, Global Star, Aero H (+), I and HSD. The AeroCom 3000B is able to support emerging communications systems without the requirement to add special interface boxes or wholesale system changeout. It can provide from 12- to 36-station (telephone) ports and offers many executive-style calling features such as multi-party conferencing, transfer, call queuing with call back, voice prompts, credit card calling, etc. It supports many types of user devices from conventional two-wire telephones to four-wire devices, ISDN, and secure voice handsets. It can be customized for virtually any application or requirement.
	AeroCom 2200 CTU	cabin management, Inmarsat compatible, Swift Broadband, Iridium compatible, fax, Inmarsat I, Aero H+	Designed for general aviation and military applications. The 2200 CTU offers many features common to a typical corporate office telecommunications system. PABX functions such as conferencing, intercom calling, transfer, executive over-ride, call queuing, voice prompts, least cost routing, VoIP, etc. are standard in all models of the system. The AeroCom 2200 offers connectivity, integration and management of all aircraft communications systems and user devices. With an internal SIP server, VoIP handsets are supported with delivery to communications transceivers in IP, PCM or analog voice protocols. The system provides connectivity to a two-wire analog subscriber or CO circuits as well as CEPT-E1 and Ethernet digital circuits to support integration to all current and emerging communications facilities. An open telecom architecture permits the addition of new communications circuits at any time and the is broadband ready.
	AeroCom 1100 CTU	moving map/info, Inmarsat compatible, Swift Broadband	Provides communications automation, medium integration and transceiver management facilities for aeronautical applications. Operational with standard telephony devices, system replicates the conveniences and services offered by contemporary "executive-of-office" communications systems in an aircraft cabin. Either the North American or European dialing plans can be adopted for familiar telephone operations such as: call transfers, intercom calling, conferencing, call on hold, etc. can easily be implemented. Communications circuit selection and transceiver control is automatic with required dialing modifications to support specific transceivers and networks performed transparently to the caller during call initiation. Recently completed the integration of the ICG AeroCom 1100 CTU with EMS Satcom's eHfusion HSD-400 high-speed Data Terminal, and its HSD-440 Inmarsat-based high-speed data terminal.
	UIU	Peripheral communication device connections and management	Interfaces include: multiple serial ports, fax dial-up data interface, Ethernet, Wi-Fi and USB. Enables users to fax and e-mail via the Iridium Network. Provides internal router functions and a HTTP server to permit up to eight client PC access. Multiple serial interfaces with port management permit connections of several RS 232 devices without the risk of port contention, collisions or data corruption. Services such as Airshow, EFBs and cabin data ports can be simultaneously connected. With the Wi-Fi option installed, PCs with Wi-Fi capabilities will automatically be assigned DHCP addresses and have immediate access to the system. Designed for use in small to intermediate size aircraft.

## INFLIGHT COMMUNICATIONS & ENTERTAINMENT SYSTEMS

Manufacturer or Service	Model/System/Service	General Capabilities	Remarks
<b>MEZZO</b> 45 Bedford Row London WC1R 4LN England + 44 (0) 207 092 1782 Fax: + 44 (0) 207 092 1808 info@MEZZO.aero <a href="http://www.mezzo.aero">www.mezzo.aero</a>	see remarks	cabin audio, cabin video, cabin management, portable IFE	This Rolls-Royce plc backed firm offers portable in-flight entertainment service, currently via 7- or 8-inch screen portable media players equipped with a 40 to 200 GB hard drive. The service includes dual headset jacks, first-run (pre-DVD) movies, fits onboard cart drawers, 12+ hour battery life, onboard power supply compliant, usage statistics downloads, on-device advertising and branding, customizable GUIs, credit card and magnetic card functionality.
<b>NAT Seattle</b> 22125 17th Ave. S.E. Ste. 107 Bothell, Wash. 98021 (425) 424-3370 (888) 655-3755 Fax: (425) 424-3380 <a href="http://www.natseattle.com">www.natseattle.com</a>	JetLAN cabin file servers and routers	cabin audio, cabin video, cabin management, WiFi Hotspot/LAN, e-mail, Internet, SMS, Inmarsat compatible, Swift Broadband, Swift64	Airborne network routers based on Linux and supporting other network applications. Telecom interfaces allow utilization of advanced satcom systems. Supports Swift64 and SwiftBroadband. Extensive avionics I/O for aircraft operations including ARINC 429, 717 and others.
<b>NAT Seattle</b> 22125 17th Ave. S.E. Ste. 107 Bothell, Wash. 98021 (425) 424-3370 (888) 655-3755 Fax: (425) 424-3380 <a href="http://www.natseattle.com">www.natseattle.com</a>	JetLAN AS250	cabin aduio, cabin video, cabin magement, moving map/info, Wi-Fi Hotspot/ LAN, e-mail, Internet, SMS, Inmarsat compatible, Swift Broadband, Swift 64	A range of cabin file servers and related software applications including moving maps and network peripherals. Telecom interfaces allow utilization of advanced satcom systems. Supports Swift64 and SwiftBroadband. Extensive avionics I/O for aircraft operations including ARINC 429, 717 and others.
<b>Omnipless</b> – Chelton Satcom Westlake Dr. Westlake, Cape Town 7945 South Africa P.O. Box 31093, Tokai 7966 South Africa +27 (0) 21-700-7000 info@omnipless.com <a href="http://www.omnipless.com">www.omnipless.com</a>	Swift64 HSD	cabin audio, cabin video, e-mail, SMS, Inmarsat compatible, Ethernet, ISDN	Provides up to 256 kbps connectivity for e-mail access, Web browsing, real-time video and data transmissions, and voice communication. System is available in either 5 MCU two-channel or 8 MCU four-channel configurations. The SDU has an integrated router function that creates multi-user interface without the need for an external router.
	SwiftBB Single-channel system	cabin audio, cabin video, e-mail, SMS, Inmarsat compatible, Swift Broadband, fax, Ethernet, ISDN	Provides single-channel SwiftBroadband system that consists of a Satellite Data Unit (SDU-7320), a combined HPA/DLNA (HLD-7260) and an antenna. The SDU has an integrated router function that creates a multi-user interface without the need for an external router.
	SwiftBB HSD	cabin audio, cabin video, e-mail, SMS, Inmarsat compatible, Swift Broadband, fax, Ethernet	The multi-channel SwiftBroadband system consists of a Satellite Data Unit (SDU), a High Power Amplifier (HPA), a diplexer/LNA and antenna. An integrated router function creates a multi-user interface without the need for an external router. The HPA-7400 is a linear amplifier capable of outputting 80 W of RF power that is sufficient to cover marginal satellite link situations such as when aircraft attitude changes (during banking and turns) or at the edge of satellite coverage.
	HGA-7000 high-gain antenna	Inmarsat compatible, Swift Broadband, Swift64/128/256	ARINC 741/ARINC 781 compliant phased array multi-channel (7+) antenna.
	HGA-7001 high-gain antenna	Inmarsat compatible, Swift Broadband, Swift64/128/256	A circular version of the ARINC 741 multi-channel HGA-7000, initially designed for deployment on the escape hatch of the Lockheed Martin C-130. It is also suitable for helicopter applications platforms because of its dimensions and low profile.
	HGA-6000 high-gain antenna	Inmarsat compatible, Swift Broadband, Swift64/128/256, Aero H/H+	Small and lightweight, mechanically steered ARINC 741, high-gain antenna and suitable for Gulfstream aircraft tail mounts.
	HGA-6500 high-gain antenna	Inmarsat compatible, Swift Broadband, Swift64/128/256, Aero H/H+	An environmentally hardened version of the ARINC 741 HGA-6000, adapted for helicopter installations. Its small footprint makes it suitable for installation on the smallest of helicopters.
	HGA-5001 high-gain antenna	Inmarsat compatible, Swift Broadband, Aero I/M	A multi-channel (4+) phased array antenna and a successor to the IGA-5006 mechanically steered antenna.
	HGA-5006 high-gain antenna	Swift Broadband, Aero I/M	A mechanically steered antenna that has been installed on more than 1,200 aircraft since its launch.

## INFLIGHT COMMUNICATIONS & ENTERTAINMENT SYSTEMS

Manufacturer or Service	Model/System/Service	General Capabilities	Remarks
<b>Panasonic Avionics Corp. (MAS Corp.)</b> 26200 Enterprise Way Lake Forest, Calif. 92630 (949) 672-2537 <a href="http://www.mascorp.com">www.mascorp.com</a>	Ex2 in-flight entertainment and communications systems	cabin audio, cabin video, cabin management, moving map/info, Wi-Fi Hotspot/LAN, e-mail, Internet, SMS	System offers scaleable modular all-digital system suited for business and regional jets to wide-body aircraft. Features such as satellite television, an Ethernet LAN, and a full entertainment and communications suite. ex2 system offers passengers with a fully personalized experience, from the time they book their ticket, to the moment they arrive at their destination. Simultaneous AVOD (Audio/Video On Demand) to all seats, with up to 550 hours of video to each passenger delivered via arm or seatback LCD screens, depending on system installed. Passengers can select from server-based a/v entertainment sources, computer applications, moving maps, single and multi-player interactive games, and intranet/Internet connectivity, including news, sports, financial markets, weather and tech news. Updated hourly in multiple languages. Mirrored servers ensure continuous delivery of digital content. Portable Media Loader refreshes on-board digital content at the gate--system loads over 300 hours of video and 36 GB of Web content in less than one hour.
<b>Rockwell Collins</b> 400 Collins Rd., N.E. Cedar Rapids, Iowa 52498 (319) 295-1000 Fax: (319) 295-2297 <a href="http://www.rockwellcollins.com">www.rockwellcollins.com</a>	Airshow 410	cabin audio, cabin video, cabin management, moving map/info	Enhanced version is 100 percent drop-in replacement for Airshow 400. CD-ROM replaced with solid-state flash data loader; two-fold increase in clock speed.
	Airshow 42000/D	cabin audio, cabin video, cabin management, moving map/info Inmarsat compatible	Provides real-time status of the aircraft's position and route, groundspeed, altitude, TTD/ETA, as well as news, nearby points of interest, safety briefings and gate connection information.
	Airshow 4000	cabin video, moving map/info Inmarsat compatible	Provides real-time flight information and moving maps, news, financials, sports and weather.
	Tailwind 300 Airborne TV system	cabin audio, cabin video, cabin management, moving map/info Inmarsat compatible	Digital airborne satellite TV for the contiguous United States. Features DirecTV, with over 100 channels of network, movie, music and optional programming.
	Tailwind 500 Tailwind 550 Airborne TV systems	cabin audio, cabin video, cabin management, Inmarsat compatible	Digital airborne satellite TV for the contiguous United States, Europe and Middle East. Features DirecTV, TPS and/or Showtime in the Middle East programming.
<b>Rosen Aviation Displays</b> 1020 Owen Loop S. Eugene, Ore. 97402 (888) 668-4955 Fax: (514) 342-4912 <a href="http://www.rosenaviation.com">www.rosenaviation.com</a>	Ultra-Cabin Management System	cabin audio, cabin video, cabin management, moving map/info	The Ultra-Cabin Management System provides passengers with control over an array of features, such as window shades, lights, seats, galley devices and entertainment. RosenView mapping systems allow passengers to track their flight path, view topographical detail, monitor flight information and weather conditions. Rosen also offers a full range of displays, from 7-in. widescreen personal plug-ins to 24-in. bulkhead monitors, as well as DVD players, audio and video distribution products and other cabin accessories.
<b>Securaplane Technologies</b> 10800 N. Mavinee Dr. Tucson, Ariz. 85737 (520) 297-0844 Fax: (520) 498-4924 <a href="http://www.securaplane.com">www.securaplane.com</a>	Airborne Video Camera systems	cabin video, cabin security	Individually configurable systems are used for applications including flight safety, security, taxi/ground maneuvering and inflight entertainment. A typical system consists of a CAM-11 quad-camera unit, CMZ-01 zoom camera unit, CMX-01 vertical fin camera unit, and a VCU-05 video control unit for a total of six camera inputs. Control of the system can be accomplished via RS-485 data bus from the cabin video control system or by keyline control from switch closure to ground. Total installed system weight — including wiring and structure — is less than 20 lb. Other cameras available include glare shield zoom, and external fin/belly cams.
<b>Starling Advanced Communications Ltd.</b> 2 Tavor House, PO Box 707 Yoqneam 20692 Israel +972-73-2597300 +972-4-9597370 Fax: +972-4-9597367 <a href="http://www.starling-com.com">www.starling-com.com</a>	MIJET and Mini MIJET	cabin audio, cabin video, cabin management, moving map/info, Wi-Fi Hotspot/LAN, e-mail, Internet, SMS, Ku-band satcom	Israeli satcom antenna maker Starling Advanced Communications and ARINC Direct will jointly market Starling's fuselage-mounted antenna systems to bring high-speed communications' capability to more medium- to large-size business jets. Currently, ARINC's SKYLink service is limited to business aircraft that can accommodate a mechanically steered tail-mount antenna. Under their new agreement, SKYLink will be offered as well to business aircraft equipped with Starling's MIJET and MiniMIJET fuselage-mounted antenna systems, giving thousands of additional business aircraft access to Internet, VPN (virtual private network), VoIP, email, mobile phone, PDA, video conferencing and SMS applications.

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Manufacturer or Service	Model/System/Service	General Capabilities	Remarks
<b>Teledyne Controls</b> 12333 W. Olympic Blvd. Los Angeles, Calif. 90064 (310) 820-4616 Fax: (310) 442-4324 <a href="http://www.teledynecontrols.com">www.teledynecontrols.com</a>	Aircraft Wireless LAN Unit (AWLU)	cabin management, Wi-Fi Hotspot/LAN, e-mail, Internet, SMS	Teledyne's wireless LAN unit provides operators with LAN connectivity both onboard the aircraft, and between the aircraft and the corporate network. This integrated system delivers in one unit the entire infrastructure required for secure wired and wireless onboard LANs and ARINC 429 devices. The AWLUG4 is a basic function is that of an Ethernet switch. It offers additional options that can be added as needed, such as: ARINC 429 interconnectivity, 802.11 for Terminal Wireless LAN Unit (TWLU) and/or 802.11 for Cabin Wireless LAN (CWLU) functionality. The AWLU allows data to be passed from equipment on the ground to equipment in the air, and vice versa, whenever the network is available. The network can be used for such things as routing non-essential ACARS messages to the ground and uploading FMS navigation databases for subsequent loading into a Flight Management Computer. It could also be used to access navigation information from ARINC 429-equipped navigation systems.
	AvVisor and AvVisor Plus Information Systems	cabin audio, cabin video, moving map/info	AvVisor and AvVisor Plus information systems provide real-time flight data and worldwide moving map cabin displays. Designed to operate independently of flight crew, system can display information in one-line, four-line and multiple line formats. Optional customized screen graphics can be changed any time via included remote computer. Users can select map zoom levels to track the aircraft's progress with varying levels of geographic detail. Available in 6.4-in.- to 10.4-in.-diagonal AMLCD displays. Interfaces include ARINC 429 RS-232/RS-422, analog and Ethernet.
<b>True North Avionics</b> 141 Bentley Avenue, Ste. B Ottawa, ON Canada K2E-6T7 (613) 224-3301 Fax: (613) 224-0954 <a href="http://www.truenorthavionics.com">www.truenorthavionics.com</a>	Simphone	Wi-Fi Hotspot/LAN, e-mail, Internet, SMS Inmarsat compatible, Swift Broadband, fax IRidium compatible	Single-LRU system serves as both an airborne telephone and an open-architecture cabin network, allowing users to communicate many ways. Among Simphone's features and functions are two all-digital channels of integrated Iridium voice and data; PBX functionality; a high-speed data router; 802.11 Wi-Fi; Voice over IP (VoIP) technology; dual CEPT-E1 interfaces for Inmarsat Classic Aero-H/H+/I; and an Ethernet link to broadband services. Analog interface enables use with legacy Satcoms and cabin paging systems, and allows operators to continue using such analog POTS systems as the Honeywell MCS-3000 Satcom.
<b>Thrane &amp; Thrane A/S</b> Lundtoftegårdsvæj 93 D 2800 Kgs. Lyngby Denmark <a href="http://www.thrane.com">www.thrane.com</a>	Aero-SB Lite	SwiftBroadband satcom	Provides Internet, email, VPN, fax and telephony in one unit.
	Aero-SB+	432 KBPS SwiftBroadband satcom	Provides 432 KBPS SwiftBroadband satcom built-in router, Wi-Fi and ISDN interfaces.
	Aero-HSD+	multi-channel Aero-HSD+ satcom	Provides global voice, fax, cockpit communications and high-speed data capabilities of the Inmarsat Aero-H+ service with the high-speed Inmarsat Swift64.
	TT-5000 Aero-I	see remarks	Provides a three-channel communications center with two individual voice/fax channels and one cockpit communications channel for AFIS/ACARS. The compact antenna and the small size of the system is adaptable to various aircraft types.
	TT-3000 Aero-M	see remarks	Designed for smaller aircraft. Provides a single channel for voice or fax in a compact, lightweight (13.2 lb) unit which can fit on most aircraft.
	TT 3024A Aero-C	see remarks	Global aircraft tracking and two-way data communications system. Users can track, poll and contact aircraft wherever they may be within the Inmarsat Network.
<b>Wingspeed Corp.</b> Concord, Mass. (978) 318-0600 <a href="http://www.wingspeedcorp.com">www.wingspeedcorp.com</a>	Wingsspeed XL Link voice and data communications system	moving map/info, Iridium compatible	Twelve-channel DGPS receiver that embeds downlink messages with aircraft position, ground track, ground speed and altitude information. GPS data sent to unit to utilize moving-map-type applications. ACU contains 760-channel VHF radio module. Palm OS 3.5 or above. Operates over ACARS network. Controller module handles ACARS messaging in addition to passing and receiving applications data to and from the display unit. A back-up battery pack (included) will run the ACU for 90 min. in the event of aircraft power loss.  <b>Antennas:</b> GPS (portable or permanently mounted) and VHF (mounted). Under development for pressurized aircraft is a composite exterior GPS/VHF combination antenna that will offer the two components in one fuselage penetration.